PATENT

Appl. No. 10/020,310

Amdt. dated: August 15, 2006

Reply to Office Action of May 17, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-8. (Canceled)

9. (Currently Amended) A system for time-dividing an optical signal for a plurality of receivers comprising:

an optical transmitter for transmitting the optical signal, wherein the optical signal includes a plurality of sections corresponding to a number of time slots, each section corresponding to a receiver in the plurality of receivers, and wherein the optical transmitter comprises a microwave source; and

a catadioptric device for time-dividing the optical signal received from the optical transmitter,

wherein the optical signal is time divided for different receivers by bending the signal at different angles with the catadioptric device at different time slots corresponding to different receivers, wherein each receiver receivers the section corresponding to the receiver, wherein the section of the bent optical signal includes information just for the receiver.

- 10. (Original) The system of claim 9, further comprising an end device, wherein the bent optical signal is transmitted to the end device from the receiver.
- 11. (Original) The system of claim 9, wherein the catadioptric device is a reflective device.
- 12. (Original) The system of claim 9, wherein the catadioptric device is a refractive device.
- 13. (Original) The system of claim 9, wherein the optical transmitter comprises a laser.

PATENT

Appl. No. 10/020,310

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- 14. (Canceled)
- 15. (Currently Amended) The system of claim 9, A system for timedividing an optical signal for a plurality of receivers comprising:

an optical transmitter for transmitting the optical signal, wherein the optical signal includes a plurality of sections corresponding to a number of time slots, each section corresponding to a receiver in the plurality of receivers, and wherein the optical transmitter comprises a radio frequency source; and

a catadioptric device for time-dividing the optical signal received from the optical transmitter,

wherein the optical signal is time divided for different receivers by bending the signal at different angles with the catadioptric device at different time slots corresponding to different receivers, wherein each receiver receivers the section corresponding to the receiver, wherein the section of the bent optical signal includes information just for the receiver.

16. (Currently Amended) A method for time dividing an optical signal for a plurality of receivers, the optical signal including a plurality of sections corresponding to the plurality of receivers, the method comprising:

transmitting the optical signal; and

bending the optical signal at a plurality of angles at a plurality of time slots, wherein sections of the optical signal correspond to different receivers, wherein the optical signal is bent at different angles at different time slots so receivers corresponding to the section can receive the section, wherein the section of the bent optical signal includes information just for the receiver, and wherein bending the optical signal comprises both reflecting and refracting the optical signal₂

wherein the plurality of receivers are coupled with a plurality of end devices, and wherein the plurality of end devices is distributed throughout a wireless network.

Appl. No. 10/020,310 PATENT

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Reply to Office Action of May 17, 2006

17. (Original) The method of claim 16, further comprising transmitting the bent optical signal to an end receiver.

18-19. (Canceled)

20. (Currently Amended) A method for time-dividing an optical signal for a plurality of receivers, the optical signal including a plurality of sections corresponding to the plurality of receivers, the method comprising:

transmitting the optical signal; and

time-dividing the optical signal at a plurality of time slots, wherein sections of the optical signal correspond to different receivers, wherein the optical signal is bent at different angles at different time slots so receivers corresponding to the section can receive the section, wherein the bent optical signal includes information just for the receiver, and wherein time-dividing the optical signal comprises both reflecting and refracting the optical signal.

wherein the plurality of receivers are coupled with a plurality of end devices, and wherein the plurality of end devices is distributed throughout a wireless network.

21. (Original) The method of claim 20, further comprising transmitting the bent optical signal to an end receiver.

22-24. (Canceled)

- 25. (Previously Presented) The system of claim 9, wherein the section of the bent optical signal received includes substantially all of the full optical signal transmitted from the optical transmitter.
- 26. (Previously Presented) The method of claim 16, wherein the section of the bent optical signal received includes substantially all of the full optical signal transmitted.
- 27. (Previously Presented) The method of claim 20, wherein the section of the bent optical signal received includes substantially all of the full optical signal transmitted.

Appl. No. 10/020,310

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Please add the following new claims:

28. (New) A system for time-dividing an optical signal for a plurality of non-collocated receivers in a wireless network, the system comprising:

an optical transmitter for transmitting the optical signal, wherein the optical signal includes a plurality of sections corresponding to a number of time slots, each section corresponding to a receiver in the plurality of receivers; and

a catadioptric device for time-dividing the optical signal received from the optical transmitter,

wherein the optical signal is time divided for different receivers by bending the signal at different angles with the catadioptric device at different time slots corresponding to different receivers, wherein each receiver receivers the section corresponding to the receiver, wherein the section of the bent optical signal includes information just for the receiver.

- 29. (New) The system of claim 28, further comprising an end device, wherein the bent optical signal is transmitted to the end device from the receiver.
- 30. (New) The system of claim 28, wherein the optical transmitter comprises a laser.
- 31. (New) The system of claim 28, wherein the optical transmitter comprises a microwave source.
- 32. (New) The system of claim 16, wherein the wireless network is a mesh network.
- 33. (New) The system of claim 20, wherein the wireless network is a mesh network.
- 34. (New) The system of claim 28, wherein the wireless network is a mesh network.